

# Overview



Field in the Andes

**T**his unit explores how the diverse geography and natural history of Meso-America and the Western Andes set the stage for the rise of the Maya, Aztec, and Inca civilizations.

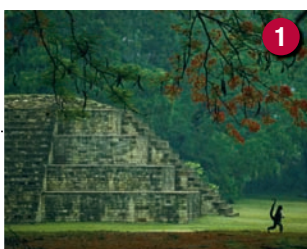
These pre-Columbian civilizations developed in tropical zones with broad topographic variation, diverse climates, and a mosaic of natural habitats. The landscape offered a wide variety of ecosystem services, from the storage and filtering of

water in the limestone of the Yucatan Peninsula to the preservation of food by the cold dry air of the high Andes. Geological events exposed seams of precious metals and stones such as gold, silver, jade, and turquoise. Natural habitats provided many goods from animals and plants—from the soft fur of wild vicuñas to rock-hard ironwood lumber to sweet vanilla to sticky rubber.

Rich soils, tropical sunshine, ample water, and remarkable plant diversity

made these regions a hotbed of plant domestication. In addition to yielding a broad base of staple crops such as corn, beans, squash, and potatoes, the region produced a cornucopia of foods including tomatoes, chilies, avocados, peanuts, pineapples, and cocoa. The richness of this area contributed to the growth of villages into cities. The distribution of resources affected the location of and land-use patterns of settlements within these landscapes.

## At a Glance



### From Riches to Ruin— Tales of Two Cities

Compare the rise and fall of two California towns and an ancient Maya city.



### Born in the Shadow of Mountains

Identify and locate Mexico, Central America, and South America including distinctive features.



### From Tropical Forests to Icy Glaciers

Create a climate map of Mexico, Central America, and South America.



## California Content Standard

- 7.7.** Students compare and contrast the geographic, political, economic, religious, and social structures of the Meso-American and Andean civilizations.
- 7.7.1.** Study the locations, landforms, and climates of Mexico, Central America, and South America and their effects on Maya, Aztec, and Inca economies, trade, and development of urban societies

As cities grew, social and political systems developed to control the production and flow of resources. As various classes rose to power, they made decisions that affected the use and distribution of resources. These human systems and their interaction with the landscape set the stage for not only the growth of great civilizations, but for their eventual decline.

This unit allows students to fully investigate the interactions of the diverse peoples and environments in this region. It provides an accessible way for students to explore the connection between geographic, political, economic, and social aspects of Meso-American and Andean civilizations and recognize ways they depended on goods and ecosystem services provided by natural systems.

The lessons in the unit follow a

## California Environmental Principle I

The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services.

**Concept A:** Students need to know that the goods produced by natural systems are essential to human life and to the functioning of our economies and cultures.

**Concept B:** Students need to know that the ecosystem services provided by natural systems are essential to human life and to the functioning of our economies and cultures.

clear progression, from an investigation of the physical features of the region to climates influenced by these features to the goods and services provided by the diversity of ecosystems. This progression expands into an exploration of the environment's influence on the rise of the Maya, Aztec, and Inca civilizations. The lessons build upon one another and encourage systems thinking

by highlighting the connections between the natural and cultural elements of these regions. The unit as a whole promotes systems thinking by encouraging students to recognize connections between different factors in each region and allowing students to identify themes common to a wide variety of cultures and historical circumstances.



### Hotbed of Biological Diversity

Identify and locate Latin American ecosystems and how they benefited the Inca, Maya, and Aztec.



### Treasure as Tribute from a Rich Land

Analyze the natural resources valued by Latin American cultures and their role in the economies.



### Moving Resources Among Mountains

Discuss and compare systems of resource distribution among Aztec, Maya, and Inca cultures.



# From Boom to Bust, California Ghost Towns

## Part I: The Wild West

**M**any people still associate California with the Wild West. They remember the rough frontier and the promise of wealth that drew cowboys and fortune hunters. Television and movie Westerns keep these memories strong. These shows continue to be popular, glamorizing this era more than 150 years after the gold rush.



What is the truth behind the glamour of these so-called wild places? Some of them grew rich quickly (boomed), went broke quickly (busted), and then left their abandoned corpses as ghost towns. How did the way people used resources seal the fates of these towns?

Two ghost towns tell the story. Bodie, located high in the eastern Sierra, promised riches that outweighed its bleak climate. China Camp, a village founded in the 1870s in the mild climate of San Francisco Bay, held its own proverbial goldmine in the form of shrimp. The fates of these two towns closely resembled each other, despite the towns' many differences.

### Bodie Boom

The town of Bodie sprouted in a treeless scrubland at 8,375 feet (2,553 meters), where the peaks of the eastern Sierra rise sharply from

the high desert of eastern California. Until the 1800s, the dry, cold climate and rugged landscape supported only small numbers of nomadic Northern Paiute Indians. But the geologic forces that created the unique landscape also exposed a mineral so valuable that settlers flocked to this harsh land: gold.

Although gold was first discovered in Bodie in 1859, it was not until 1875 that a cave-in exposed ore and attracted San Francisco investors who fueled the town's growth. With the financial backing in place for the costly operations needed to extract the ore, Bodie boomed. The Standard



Bodie State Park



Mining Company began massive mining operations, and earned more than \$784,000 from gold and silver in 1877 (approximately \$446,000,000 in 2008 dollars). This bonanza drew hundreds of prospectors, especially as reports spread that ore gushed from a gigantic vein. Early luck led to overly optimistic and ever-bigger investments.

With a single industry at the base of its economy, Bodie developed into a gamble. Certain goods needed to support mining did not exist in the local ecosystem; for example, townsfolk needed wood for construction, mineshaft beams, and heating, but Bodie had few trees. The Bodie and Benton Railway formed in 1881 just to bring in lumber.

Despite the lack of local resources, many services developed to support people in the growing city. Bodie became known as a brash town full of saloons and gambling halls. The real-life version of a Western movie, behavior in Bodie resulted in many shoot-outs and near daily body counts.

## Growth of China Camp

Many former Chinese railroad workers, originally brought to the U.S. because they represented “cheap” labor, found themselves out of work after the gold rush. In the 1870s and 1880s many of these workers headed toward the coast and the mild climate of the San Francisco Bay.

Fed by the silt-laden waters of the Sacramento-San Joaquin River Delta, the San Francisco Bay offered a diversity of marine resources, including the delicious California bay shrimp. Saltgrass around the bay supported huge populations of these creatures in the mid-1800s.

Many Chinese in California hailed from the Pearl River Delta, where shrimping was a well-established industry; the new settlers used the same skills to duplicate their success

in Northern California. Chinese immigrants settled in numerous “shrimp camps” on San Francisco and San Pablo bays. China Camp, on the shores of San Pablo Bay directly across from the delta in an area of extensive mudflats, saltgrass, and pickleweed, was the largest of these camps, with 500 residents at its peak.

Like Bodie, China Camp consisted mainly of men. The camp provided a few services and shops, including a marine supply store. Shrimpers in China Camp coordinated their

efforts by circling their boats close together; they ate, drank tea, and relaxed as a group as the tide swept shrimp into nets set in tidal mudflats. These shrimpers pulled in large catches thanks to their special bag nets. Initially they dried most of the catch and sent it back to China. By 1885 the fishermen were bringing in more than 500,000 pounds of shrimp for export and local consumption.



Drawing of China Camp children



## Part 2: The Wild West



Bodie State Park

### Bodie Bust

The gold in Bodie lasted only a few years. After peaking in mid-1880 at about 7,000, the population dropped to 3,000 by 1882, when several mining companies went bankrupt. An earthquake made a major mine inaccessible and the miners decided it would be too difficult and expensive to relocate. With the town's only industry fading, people went elsewhere for opportunities.

The town lingered on as a few citizens tried to make a simple living off the land. But a harsh winter from 1878 to 1879 claimed hundreds of lives from exposure, disease, and a gunpowder explosion. A major fire in 1937 all but leveled what remained of the town.

Mining continued on a smaller scale until 1942, when a new law passed and limited mining to endeavors that aided the war effort. Bodie had to be self-reliant to survive, so when the town could no longer tap its minerals for profit the population

dwindled to a few families. The last family left in 1962. Because Bodie was so remote, residents found it nearly impossible to bring their belongings with them when they left. Many of these items remain in Bodie today, forming a well-preserved ghost town full of artifacts now protected as Bodie State Historic Park.

### Crash at China Camp

As demand for bay shrimp grew locally, so did discontent with the success of the Chinese. The anti-Chinese sentiment from the established fishing industry stemmed partly from the bust following the gold rush. Unemployed miners traveled to San Francisco looking for ways to live off the land; with little work to go around, non-Chinese fishermen pressured the government to weaken the competition.

People began blaming the bay's degrading ecosystem on habitat damage caused by the Chinese shrimpers. Pressure led to prohibitive

new laws that required special licenses, limited the fishing season, outlawed traditional Chinese fishing techniques, prohibited export, and restricted catch size.

By blaming the Chinese for the bay's decline, legislators overlooked other possible causes, such as the disposal of untreated sewage and the diversion of fresh water by cities. The outlawing of bag nets in 1911 proved the final blow to the Chinese shrimp-ing industry. Eventually only one family-run company remained at China Camp. That family sold the town to California Department of Parks and Recreation in 1976; what remains can be visited at China Camp State Park.

### Boom and Bust Cycles

Each of these towns provided one plentiful resource, but residents faced different challenges accessing the resources. During Bodie's boom, financing helped overcome tough physical geography to mine a wealth of minerals. The town went bust when a natural disaster cut off its main way to access these minerals. China Camp boomed because the settlers matched their rich fishing know-how with abundant bay resources. The bust came when social and political pressures kept the shrimpers from using their skills at a time when pollution and other factors increasingly impacted the bay's resources.

To survive over the long term, a community needs steady access to a variety of resources. Both China Camp and Bodie depended so heavily on a single resource that they could not survive when that resource declined or became inaccessible. This problem is typical of many economies based on natural resources.



